



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,203	07/11/2003	Ylian Saint-Hilaire	42P15882	4160
45209	7590	08/06/2008	EXAMINER	
INTEL/BSTZ			HAJNIK, DANIEL F	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP			ART UNIT	PAPER NUMBER
1279 OAKMEAD PARKWAY				2628
SUNNYVALE, CA 94085-4040				
			MAIL DATE	DELIVERY MODE
			08/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,203	SAINT-HILAIRE ET AL.	
	Examiner	Art Unit	
	DANIEL F. HAJNIK	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 April 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6,8 and 10-34 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,8 and 10-34 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the claimed computer readable medium (i.e. see claim 30).

Claim Objections

1. Claims 1-16 are objected to because of the following informalities:

In independent claim 1, in the last line:

"presenting the animation of the image object on a display of the device"

The "device" lacks antecedent basis because it is not clear if the device is referring back to the first device or the second device.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 30-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 30-34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, electro-magnetic signals (where according to the specification the

computer readable medium can be a signal, see top of page 4 in [0013]). Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 10-11, 15-21, 24-27, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok et al. (US Pub 2003/0182469) in view of Merrill et al. (US Patent 6,369,821)

As per claim 1, Lok teaches the claimed:

1. A method comprising:

receiving, via a network, a motion command ... at a first device from a second device
[0027], “*The component in the user interface toolkit may be configured to render a graphical item and the remote-capable component may be configured to generate a command to render a*

graphical item” where the motion is the changing or movement within different user interface elements, i.e. selection of different items in the dropdown menu 216 in figure 6a. In this instance, the first device is the client in figure 3 and the second device is the server in figure 3);

wherein the motion command, without including pixel values generated by the second device ([0039], “*the baseline interface toolkit 110, but which issue remote messages rather than execute graphical functions ... transmits the commands across the network to the client 104 ... A client viewer ... translates the messages issued ... which are rendered on the client frame buffer 1*”);

directs animation of an image object ([0041], “*In rendering the graphical component, the toolkit may include commands to display a plurality of shapes, colors, and text. The toolkit is configured to interact with the application according to an application programming interface. For example, the toolkit receives an invocation, or call, from the application to draw graphical components at certain times during the operation of the application” where drawing graphical components at certain times creates animation effects);*

Presenting the animation of the image object on a display of the device ([0041], “*a toolkit has the ability to draw a frequently-used, graphical components on a user display as commanded by an application running on the computer*”).

Lok does not teach the remaining claim limitations.

Merrill teaches the claimed:

An index, a plurality of display coordinates and a time value (*col 8, lines 52-54, “The frame data 170 consists of a frame type (image, branch or sound) 172, frame position (x, y coordinates) 174, duration (in 60ths or a second) 176, a unique ID” where a unique ID is an index. In this instance, the unique ID is used to reference a particular animated object and its associated frame data. Further, according to fig 5 a given animation file structure can contain multiple frames, i.e. frame 170 where each frame has display coordinates, X and Y. Thus, in animation file structure there are a plurality of display coordinates because there are multiple frames).*

An image cache referenced by the index at the plurality of display coordinates over the received time period (*col 9, lines 7-10, “the method used to retrieve image data for the current frame. If the frame type is an image, the sequencer first looks in a data cache of frame bitmaps for an entry equal to the next frame's ID” and col 8, lines 52-54, “The frame data 170 consists of a frame type (image, branch or sound) 172, frame position (x, y coordinates) 174, duration (in 60ths or a second) 176, a unique ID” where a duration is a received time period).*

updating a frame buffer of the first device with the image object of the image cache over the time period to animate the image object per the motion command (*col 9, lines 7-10, “the method used to retrieve image data for the current frame. If the frame type is an image, the sequencer first looks in a data cache of frame bitmaps for an entry equal to the next frame's ID” and in figure 6. The updating is done over time according to the duration of the frame, see figure 5, piece 176);*

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lok with Merrill in order to expand the range of graphical capabilities in the user interface and make the output more interesting. Lok can be modified by Merrill by incorporating the unique frame ID tags, coordinate tags, duration tags, and image cache of Merrill and putting it into the interface toolkit of Merrill. Through this combination, the animating elements and their associated tags in Merrill can be built into the graphical user interfaces used by Lok on the client system as shown in figure 7.

As per claim 2, Lok teaches the claimed:

2. The method of claim 1 further comprising generating a video output signal representative of the frame buffer and the motion of the image object (*[0041], “a toolkit has the ability to draw a frequently-used, graphical components on a user display as commanded by an application running on the computer” where the displaying requires an output signal*).

As per claim 3, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

3. The method of claim 1 further comprising receiving a background image from the second device (*col 5, lines 42-46, “During playback of the animation, the server relies on graphic support software in the underlying operating system 120 to create windows, post messages for windows, and paint windows and col 4, lines 66-67, “the color of corresponding pixels in the background bitmap”*. Thus, for animation playback the background image data is transferred from the server to the client and displayed on the client),

storing the background image to a background buffer (*col 9, lines 30-32, “The loader constructs a composite bitmap by performing bit block transfers from the decompressed bitmaps to an off-screen buffer” where part of the off-screen buffer is a background buffer where background pixels are stored. This is because the animation is drawn overtop the background, thus in order to form a composite bitmap, some background data is used and maybe loaded from an offscreen buffer*), and

updating the frame buffer with the background image prior to updating the frame buffer with the image object (*col 11, lines 27-29, “Finally, the operating system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation”*).

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the background images as taught by Merrill with the teachings of Lok in order to enhance the graphical user interface with more interesting features and design through the use of background images on the screen.

As per claim 4, the reasons and rationale for the rejection of claim 3 is incorporated herein. Lok does not teach the claimed limitations.

Merrill teaches the claimed:

decompressing the background image (*col 4, lines 66-67, “the color of the corresponding pixels in the background bitmap” and col 13, lines 23-24, “If the image bits are in a compressed format they are decompressed”*) and

storing in a decompressed form (*col 13, lines 31-33, “The animation is played by first rendering the uncompressed frame image data for the next frame to an offscreen video memory buffer”*).

It would have been obvious to one of ordinary skill in the art at the time of invention to use the background decompression techniques as taught by Merrill with the teachings of Lok. The motivation of claim 3 is incorporated herein.

As per claim 5, Lok teaches the claimed:

5. The method of claim 1 further comprising

receiving the image object from the second device (*[0046]*, “*receiving commands to draw graphical items*”), and

storing the image object in the image cache (*[0039]*, “*remote-baseline interface toolkit 110, which are rendered on the client frame buffer 116*” where image object is stored as a rendered object).

As per claim 6, this claim is similar in scope to claims 4 and 5, and thus is rejected under the same rationale.

As per claim 10, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

10. The method of claim 1 wherein

the motion command indicates a first scale and a second scale, (*col 4, lines 31-32*, “*The animated character 60 can move anywhere in the user interface*”, *col 15, line 31*, “*to scale an animation*”, *15, lines 33-34*, “*when the scale of an animation changes*” where it is required for a changing animation during scaling to have a beginning scale (first scale) and ending scale

(second scale), and col 14, lines 4-6, “*After the frame image is rendered to the display device, an operating system timer is set to go off in the amount of time specified by the frame’s duration*”), updating the frame buffer with the image object comprises updating the frame buffer to animate the image object transitioning from the first scale to the second scale over the time period (col 11, lines 27-29, “*Finally, the operating system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation*”).

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the image scaling as taught by Merrill with the teachings of Lok in order to provide a wider array and more flexibility to the image manipulation techniques available to the user for making interesting user interfaces.

As per claim 11, the reasons and rationale for the rejection of claim 10 is incorporated herein.

As per claim 15, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

15. The method of claim 1 further comprising receiving a cache management command from the second device, and updating the image cache per the cache management command (col 14, lines 57-63, “*However, after the region is used it is save to the region cache on disk. The next time the region is required it can simply be read from the cache instead of being generated in real-time. Thus, the system gets the benefit of the pre-computed region without it having to have been downloaded*” where saving the region to cache is updating the image cache and this saving to the cache is a cache management command).

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the cache management as taught by Merrill with the teachings of Lok in order to provide a better and more efficient cache by actively managing it through management commands.

As per claim 16, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

16. The method of claim 1 further comprising providing the second device with an indication that the device has completed the motion command (*col 22, lines 66-67, “Stop—Clients invoke this method to halt the current animation and play the next queued animation” and col 32, lines 37-39, “The server monitors for these client-specific commands as well as global commands and sends a notification to the appropriate client when it detects the input command” where this notification is an indication*).

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize indication message as taught by Merrill with the teachings of Lok in order to provide better feedback to the another remote device and better communication.

As per claim 17, the reasons and rationale for the rejection of claim 1 is incorporated herein. Lok teaches the claimed:

17. An apparatus (*in figure 3, piece 102, “server”*) comprising at least one processor to execute instructions (*[f0054], “The application logic 106 is executed entirely in the server 102” where executing requires a processor*),

a network interface controller to transmit commands to a remote device (*in the abstract, “A network communication protocol of sending messages between the remote-capable user interface toolkit on the server and the user interface toolkit on the client” where a network interface controller is required to make the network communication protocol work properly*), a memory comprising a plurality of instructions that in response to being executed by the at least one processor ([0054], “*The application logic 106 is executed entirely in the server 102 where the application logic has instructions associated with the logic*”), result in the at least one processor,

loading the remote device with image objects ([0027], “*Similarly, the server may be configured to communicate the message to the user interface toolkit on the remote client to render a graphical item*” where *graphical items can have image objects associated with them*), and

As per claim 18, Lok teaches the claimed:

18. The apparatus of claim 17 wherein the plurality of instructions further result in the at least one processor generating the one or more motion commands based upon one or more events generated by an application of the apparatus ([0044], “*When the user clicks the button, the toolkit generates an event. In this case, the result may be that a toolkit text window is automatically closed when the event listener detects an event triggered by the button component*” where *closing the toolkit text window is a command*).

As per claim 19, Lok teaches the claimed:

19. The apparatus of claim 17 wherein the plurality of instructions further result in the at least one processor generating the one or more motion commands based upon one or more events received from the remote device via the network interface controller (*[0046]*, “*These events are then conveyed to the application according to the application programming interface, which enables the application to take some action based on the events generated by the user*” where *events is communicated across the network between client 104 and server 102 in figure 3*).

As per claim 20, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

the motion command indicates first location, second location, and the time period (*col 4, lines 31-32*, “*The animated character 60 can move anywhere in the user interface*”, *col 10, line 66*, “*The first step is to position the region window at the appropriate location as specified by the frame’s x, y coordinate in the frame data block*” (*first position*) and *col 22, “Move to—This method moves the animation to a specified location in screen coordinates*” (*second location*) and *col 14, lines 4-6*, “*After the frame image is rendered to the display device, an operating system timer is set to go off in the amount of time specified by the frame’s duration*” (*a time period*)). updating the frame buffer with the image object comprises updating the frame buffer to animate the image object moving from the first location to the second location over the time (*col 11, lines 27-29*, “*Finally, the operating system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation*”).

It would have been obvious to one of ordinary skill in the art at the time of invention to use the motion commands and updating as taught by Merrill with the teachings of Lok in order to better

organize the motion command data structures through the use of explicit coordinate locations and time periods.

As per claims 21, 24, 25, 26, and 27, these claims are similar in scope to claims 10, 1, 2, 20, and 10, respectively, and thus are rejected under the same rationale.

As per claim 30, the reasons and rationale for the rejection of claims 1 and 17 are incorporated herein. Lok teaches the claimed:

30. A tangible computer-readable storage medium comprising a plurality of instructions that in response to being executed, result in an apparatus, determining to update a graphical user interface in response to one or more events (*[0053], “the application logic 106 which resides on the server 102 interacts with the remote client 104 by making calls on the RJFC components on the server 102 alone” where application logic to reside on the server requires a storage medium and [0054], “The application logic 106 is configured by the programmer to interact with the user interface toolkit according to an application programming interface” where the user interface is a graphical user interface),*

As per claims 31 and 32 these claims are similar in scope to claims 20 and 10, respectively, and thus are rejected under the same rationale.

3. Claims 8, 12, 13, 22, 23, 28, 29, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok in view of Merrill in further view of Stern (US Patent 4,600,919).

As per claim 8, the reasons and rationale for the rejection of claim 20 is incorporated herein.

Lok does not explicitly teach the remaining claim limitations.

Stern teaches the claimed:

Image object moving along a curve defined by the plurality of coordinates over the time period
(in figure 10 where the image moves along a curve).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lok, Merrill, and Stern. Lok and Merrill can be modified by Stern by incorporating the curve object movements into the animation system used in figures 5 and 6 of Merrill. The combination can be achieved by matching to curve movement coordinates of Stern with the coordinates saved in piece 174 in animation file structure of figure 5 of Merrill. Stern teaches one advantage of the combination, by teaching of generating realistic motion with minimal labor (an automated process using interpolation between key frames) (col 2, lines 7-13).

As per claim 12, Lok teaches the claimed:

updating the frame buffer with the image object comprises updating the frame buffer
([0041], “*In rendering the graphical component, the toolkit may include commands to display a plurality of shapes, colors, and text ... the toolkit receives an invocation, or call, from the application to draw graphical components at certain times during the operation of the application*” where drawing graphics at certain times is updating).

Lok does not explicitly teach the remaining claim limitation.

Stern teaches the claimed:

the motion command indicates a first rotation, a second rotation and

the image is rotated from the first rotation to the second rotation over the time period (*col 10, lines 33-36, “Each of the motion, rotation, and scaling parameters of the transformation matrices of the current joint are interpolated in the present invention, and this is done for each of the x, y, and z components” where this interpolation can occur between a starting rotation (first rotation) and an ending rotation (second rotation) over a period of time, i.e. over the frames shown in figure 10.*)

It would have been obvious to one of ordinary skill in the art at the time of invention to use the first and second rotations as taught by Stern with the teachings of Lok. The motivation of claim 8 is incorporated herein.

As per claims 13, 22, 23, 28, 29, 33, and 34, these claims are similar in scope to claims 12, 12, 8, 12, 8, 12, and 8, respectively, and thus are rejected under the same rationale.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok in view of Merrill in further view of Richardson (NPL Document, “The RFB Protocol”).

As per claim 14, Lok does not explicitly teach the remaining claim limitations.

Richardson teaches the claimed:

14. The method of claim 1 further comprising receiving a capabilities command from the second device, and providing the second device with capabilities of the device (*page 7, section 5.1.1, first paragraph, “Handshaking begins by the server sending the client a ProtocolVersion*

message. This lets the client know which is the latest RFB protocol version number supported by the server” where this version number is part of the capabilities of the client).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lok, Merrill, and Richardson. Lok and Merrill can be modified by Richardson by incorporating the capabilities checking technique of Richardson into the network communicate protocol used by Lok in [0057]. One advantage of the combination is to increase the reliability of the system by ensuring adequate capabilities during interaction.

Response to Arguments

1. Applicant's arguments filed 4/10/2008 have been fully considered but they are not persuasive.

Applicant argues that claim 30 and its associated dependent claims are statutory as amended (towards top of page 10 in filed response).

The examiner respectfully maintains that the rejections are proper because, in this case, the examiner is interpreting the word “tangible” to mean “an attribute that is capable of being detected or perceived with the senses”. Under some circumstances, one is still capable of perceiving or detecting signals, and thus, the signals are tangible. One solution in overcoming this rejection based on nonstatutory subject matter is to consider amending the specification to narrow the definition of computer-readable medium. For example, applicants may consider cancelling any references to the computer-readable medium being a signal or carrier wave in the specification.

Applicant argues:

Applicant submits both Lok and Merrill fail to disclose or suggest receiving an index, display coordinates or a time value at a first device from a second device via network. Lok discloses client receiving a message to perform a function from a client from a server. However, there is no disclosure or suggestion of the message including an index, display coordinates or a time value.

(middle of page 11 in filed response).

In this instance, the examiner respectfully believes the rejection statement is proper because Merrill refers to data structures that are similar to these claimed concepts in their reference. For example, one can consider the animation file structure used in Merrill (in col 8, lines 48-60) and how it is organized. In this structure, an animation header list is used in conjunction with blocks of data for each frame. In addition, the animation data structure is communicated between computers. The frame data within the animation data structure has a frame type, duration, a unique ID, and an offset in order to define where compressed bitmaps for each frame reside in the overall data structure (see col 8, lines 51-55). In this case, it appears that the communication of animation is similar to the claimed message. This is because the animation is sent from the server to a client computer (*col 5, lines 40-42, "an animation server 100, which controls the playback of animation, and one or more clients 102-106, which request animation services from the server"*) where the animation data is communicated like a message between the computers. If the animation data is part of a message, then the frame data as mentioned in col 8, lines 51-55 contains the claimed index, display coordinates, and time value. In particular, Merrill states (*col*

8, lines 52-54, “*The frame data 170 consists of a frame type (image, branch or sound) 172, frame position (x, y coordinates) 174, duration (in 60ths or a second) 176, a unique ID”). In Merrill, the index is the unique ID number in the animation frame data, and the time value is the duration in the animation frame data. In addition, the display coordinates are similar to the X,Y frame position coordinates in the frame data because these coordinates indicate where the bitmap is displayed in respect to the animation. Thus, Merrill teaches these particular claimed aspects as argued.*

Applicant argues:

Further, claim 1 recites updating a frame buffer of the first device with an image object of an image cache over a time period to animate the image object per a motion command. Applicant submits neither Lok nor Merrill disclose or suggest such a feature ... However, applicant submits that such an assertion does not address a process of updating a frame buffer with an image object of an image cache over a time period to animate the image object per the motion command.
(bottom half of page 11 to top of page 12 in filed response).

In regards to this particular argument, the examiner respectfully suggests that the rejections are proper because Merrill teaches the concept of time in their animation process (*for example, col 8, lines 52-54, “The frame data 170 consists of a frame type (image, branch or sound) 172, frame position (x, y coordinates) 174, duration (in 60ths or a second) 176, a unique ID”; col 8, lines 56-57, “Animation branch frames allow developers to specify alternate pathways through the animation sequence”*). These passages indicate that the animation changes occur over time, and over a plurality of frames. For example, a duration is a measure of time and the concept of an

animation sequence implies change over time. One of ordinary skill in the art would recognize that a frame buffer is associated with updating a display such as an animation (*i.e. see col 11, lines 27-29, "Finally, the operation system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation"*). Since the animation is using images and bitmaps to display the animation, this indicates that the frame buffer is changing over time to animate an image object. Merrill further teaches the use of an image cache for use with their animation in the following passage (*col 9, lines 7-10, "the method used to retrieve image data for the current frame. If the frame type is an image, the sequencer first looks in a data cache of frame bitmaps for an entry equal to the next frame's ID"*). Based on this combination of teachings in the reference, Merrill teaches the claimed feature as argued.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel F. Hajnik whose telephone number is (571) 272-7642. The examiner can normally be reached on Mon-Fri (8:30A-5:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka J. Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ulka Chauhan/
Supervisory Patent Examiner, Art Unit
2628

/Daniel Hajnik/

DFH